

CLAIMS

5 1. A lighting equipment having a reflector comprising a substrate comprised of a thermoplastic resin containing an alicyclic structure on which is formed a reflecting layer with a reflectance of at least 70%.

2. The lighting equipment as set forth in claim 1, further comprising a lens for condensing light of a light source reflected by said reflector.

10 3. The lighting equipment as set forth in claim 1, further comprising a lamp cover allowing passage of light of a light source reflected by said reflector.

15 4. The lighting equipment as set forth in claim 1, further comprising a lamp cap covering part or all of a light source.

20 5. The lighting equipment as set forth in claim 1, further comprising a light guide having a light incident face to which is introduced at least one type of light selected from the group of light from a light source and light from a light source reflected by a reflector and an emission face emitting the incident light introduced from the incident surface to the outside.

6. A lighting equipment comprising:

25 a reflector having a substrate comprised of a

thermoplastic resin containing an alicyclic structure
on which is formed a reflecting layer with a
reflectance of at least 70%,

5 a lens for condensing light of a light source
reflected by the reflector,

a lamp cover allowing a passage of light of the
light source reflected by the reflector,

a lamp cap covering part or all of the light
source, and

10 a light guide having an incident face to which
is introduced at least one type of light selected from
light from the light source and light from the light
source reflected by the reflector and an emission face
emitting the incident light introduced from the
15 incident face to the outside.

7. A reflector for a lighting equipment comprising
a substrate comprised of a thermoplastic resin
containing an alicyclic structure on which is formed a
reflecting layer with a reflectance of at least 70%.

20 8. The reflector for a lighting equipment as set
forth in claim 7, characterized in that said
reflecting layer is comprised of a metal

9. A reflector for a lighting equipment comprising
a substrate comprised of a thermoplastic resin
25 containing an alicyclic structure on which is provided

a metal layer.

10. The reflector for a lighting equipment as set forth in claim 7, wherein said reflecting layer has a thickness of 5 to 10,000 nm.

5 11. The reflector for a lighting equipment as set forth in claim 7, characterized in that said reflecting layer is provided by vapor deposition.

12. The reflector for a lighting equipment as set forth in claim 7, characterized in that said substrate is comprised of a resin composition containing a thermoplastic resin containing an alicyclic structure and at least one compounding agent selected from the group comprising a partial ether compound of a polyhydric alcohol and/or a partial ester compound of a polyhydric alcohol, a soft polymer, a filler, and a compound incompatible with the thermoplastic resin having an alicyclic structure.

13. The reflector for a lighting equipment as set forth in claim 7, characterized in that said substrate is comprised of a resin composition comprised of a thermoplastic resin containing an alicyclic structure to which is blended a soft polymer having a glass transition temperature of not more than 30°C.

14. The reflector for a lighting equipment as set forth in claim 7, characterized in that the substrate

is comprised of a resin composition comprised of a thermoplastic resin containing an alicyclic structure to which is blended a crystalline polymer,

15. The reflector for a lighting equipment as set forth in claim 7, characterized in that the substrate is comprised of at least one type of thermoplastic resin containing an alicyclic structure selected from the group comprising a ring-opening polymer of a norbornene-based monomer, a hydrogenate of a ring-opening polymer of a norbornene-based monomer, and an addition polymer including addition type repeating units of an at least three-ring norbornene-based monomer.

16. The reflector for a lighting equipment as set forth in any of claims 7 to 15, characterized in that the amount of repeating units containing polar groups in the thermoplastic resin containing an alicyclic structure is not more than 50 wt%.

17. The reflector for a lighting equipment as set forth in any of claims 7 to 15, characterized in that the thermoplastic resin containing an alicyclic structure has a melt flow rate, measured by JIS-K6719 at a temperature of 280°C and a load of 2.16 kgf, of 4 to 100 g/10 min.

18. The reflector for a lighting equipment as set

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forth in any of claims 7 to 14, characterized in that the thermoplastic resin containing an alicyclic structure has repeating units comprised of ring structures other than norbornene rings.

19. A lens for a lighting equipment comprised of a resin composition comprising:

a thermoplastic resin containing an alicyclic structure and

at least one compounding agent selected from the group comprising a partial ether compound of a polyhydric alcohol and/or a partial ester compound of a polyhydric alcohol, a soft polymer, a filler, and a compound incompatible with the thermoplastic resin having an alicyclic structure.

20. A lamp cover for a lighting equipment provided in front of a light source and allowing passage of light of the light source, said lamp cover for a lighting equipment comprised of a thermoplastic resin containing an alicyclic structure.

21. A lamp cap for a lighting equipment covering part or all of a light source, said lamp cap comprised of a thermoplastic resin containing an alicyclic structure.

22. A light guide for a lighting equipment provided in a light chamber of the lighting equipment and

having a light incident face to which is introduced at least one type of light selected from the group of light from a light source and light from a light source reflected by a reflector and an emission face emitting the incident light introduced from the incident surface to the outside, said light guide for a lighting equipment comprised of a thermoplastic resin containing an alicyclic structure having a glass transition temperature of at least 90°C.

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